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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,196	01/22/2004	Tian-Yuan Lai	LAIT 3004/EM	2339
23364	7590	10/19/2005	EXAMINER	
BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			CHANDRAN, BIJU INDIRA	
			ART UNIT	PAPER NUMBER
			2835	

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/761,196	<b>Applicant(s)</b> LAI, TIAN-YUAN	
	<b>Examiner</b> Biju Chandran	<b>Art Unit</b> 2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on 22 January 2004.

2a) ☐ This action is **FINAL**.

2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) 1-9 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 1-9 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on 22 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some \* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

1. Claims 1 and 3 objected to because of the following informalities:  
Sentence "... said two parallel plates 30 adjacent ..." in claim 1 should be corrected to read "... said two parallel plates adjacent ...", and the sentence "... two adjacent first parts 20 for connecting ..." in claim 3 should be corrected to read "... two adjacent first parts for connecting ...".  
Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant claims

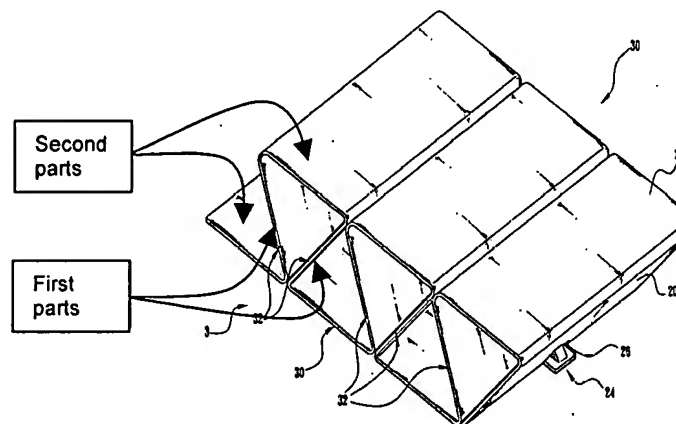


FIG. 3

"....wherein any one of said second part is disposed between any two of

said first parts,...". As the attached figure illustrates (applicant's figure 3), this is not met in the applicant's invention.

3. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The described first and second connecting members disposed at the ends of any two adjacent first parts are not evident from the figures. The drawings must show every feature of the invention specified in the claims.
4. Claims 4, 5 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. These claims depend upon themselves. The examiner has assumed that each of them depend upon the preceding claim respectively.

### ***Drawings***

5. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the heat dissipating device made up of units, each composed of two parallel plates 30 and two supporting plates 32 as described in page 4, lines 7-9 of the specification. The figures indicate a continuous structure.
6. Figure 4 does not appear to be a sectional view of the embodiment shown in Figure 5.

7. The described first and second connecting members disposed at the ends of any two adjacent first parts are not evident from the figures.

Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 2 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Haushalter (US Patent 4,926,935).
  - Regarding claim 1, Haushalter discloses a heat-dissipating device (10) comprising a sheet formed thereon a plurality of first parts (16) and a plurality of second parts (12), wherein said second parts are disposed between said first parts, and the junction between said first part and said second part is bent with an angle enabling said two adjacent first parts to be connected with each other (column 2, lines 23-24) at the corresponding ends distal to said second part; wherein any two adjacent said second parts act as two corresponding parallel plates of a heat-dissipating device, and said first part there between acts as a supporting plate of the heat-dissipating device for supporting said two parallel plates adjacent thereto (see figure 2).
  - Regarding claim 2, Haushalter further discloses that said first parts adjacent to different ends of said second parts are of the lengths enabling the corresponding ends of two adjacent said first parts to be connected with each other after the junction between the first part and

the second part being bent (see figures 1 2, and column 2, lines 11-20).

- Regarding claim 6, Haushalter further discloses that a joint part ('brazing material') is disposed at the place (see column 2, line 23-24), where the corresponding ends of said two adjacent first parts are in contact with each other, to connect the corresponding ends of said two adjacent first parts together (column 1, lines 35-40).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haushalter in view of Lai (PGPub US 2004/0206475 A1). Haushalter discloses all the limitations of claim 1. Haushalter does not disclose connecting members at the end of first parts. Lai discloses at least one first connecting member (14), which is disposed on said first part (12) at the end distal to one end of said adjacent second part (11), and a second connecting member (14), which is disposed on the corresponding position of another first part at the end distal to another end of said adjacent second part, wherein said first and second connecting members are

respectively disposed on the corresponding positions of the ends of any two adjacent first parts for connecting the ends of said two first parts together (see figure 2).

10. Claims 4 and 5 rejected under 35 U.S.C. 103(a) as being unpatentable over Haushalter in view of Lai as applied to claim 3 above, and further in view of Lee et al. (PGPub US 2004/0206475 A1).
  - Regarding claim 4, Haushalter as modified by Lai discloses all the limitations of claim 3. Lai further discloses that the said first connecting member further comprises a connecting plate (14), which is extended from said first part and is bent to a position parallel to said second part (13), and a hook plate (15), which is extended from said connecting plate and is bent to a position having an angle with respect to said second part. Lai does not disclose that the first connecting member is inserted into the second connecting member. Lee et al. discloses a heat dissipating device (20) with first (66) and second (46) connecting members wherein, while said first connecting member being connected with said second connecting member, said connecting plate is inserted into said second connecting member from one side thereto: enabling said hook plate (662) to expand against another side of said second connecting member and latch said two adjacent first parts together and preventing said connecting plate from being separated from said



second connecting member (see figures 1 and 2). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to incorporate the first and second connecting members as taught by Lee et al. in the heat dissipating device disclosed by Haushalter to improve the structural integrity of the apparatus during shock or vibrations during operation and transportation (Lee et al., paragraph 0007).

- Regarding claim 5, Lee et al. further discloses that that the said second connecting member may be a through hole (46).

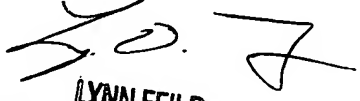
11. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haushalter. Haushalter discloses that the joint part is formed by brazing the corresponding ends of two adjacent first parts together. At the time the invention was made it would have been obvious to one of ordinary skill in the art to attach the parts together using the most economical process that was suitable for the application. Even though these claims are limited by and defined by the recited process, the determination of patentability of the product is based on the product itself, and does not depend on its method of production. If the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In Re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Biju Chandran whose telephone number is (571) 272-5953. The examiner can normally be reached on 8AM - 5PM. Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571) 272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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LYNN FEILD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800